

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for managing a plurality of computer systems attached to a network, said method comprising the computer implemented steps of:

~~for each type of element in said plurality of computer systems,~~ defining attributes that are of interest in the operation of said computer systems, for each type of element in said plurality of computer systems;

~~for each element in said plurality of computer systems,~~ assigning values to each of said attributes associated with ~~[[said]]an element~~ for each element in said plurality of computer systems;

defining a policy concerning a first set of said elements in terms of relationships between a corresponding first set of values of said attributes associated with said first set of said elements and a second set of desired values; and

performing at least one operation, chosen from a group of set operations consisting of: filter, projection, section, diagonal, union, intersection, subset, setminus, and cardinal, on said first set of values to determine if said first set of values meets said policy.

2. (Original) The method of claim 1, further comprising providing a report on compliance to said policy by said first set of elements.

3. (Cancelled)

4. (Currently Amended) The method of ~~Claim 1~~ claim 2, wherein said reporting step comprising reporting elements that did not comply with said policy.

5. (Currently Amended) The method of ~~Claim~~ claim 1, wherein said defining a policy step uses the relationships of “belongs to” and “does not belong to”.

6. (Currently Amended) The method of ~~Claim~~ claim 1, wherein said defining a policy step uses multiple relationships joined by the operations “and”, “or”, and “not”.

7. (Currently Amended) A computer program product, comprising computer readable instructions tangibly embodied in a computer readable recordable-type medium, for managing enforcement of a set of policies on a plurality of computer systems attached to a network, said computer program product comprising:

first instructions for defining, for each type of element in said plurality of computer systems, attributes that are of interest in the operation of said computer systems;

second instructions for assigning, for each element in said plurality of computer systems, values to each of said attributes associated with said element;

third instructions for defining a policy concerning a first set of said elements in terms of relationships between a corresponding first set of values of said attributes associated with said first set of elements and a second set of values; and

fourth instructions for performing at least one operation, chosen from a group of set operations consisting of: filter, projection, section, diagonal, union, intersection, subset, setminus, and cardinal, on said first set of values to determine if said first set of values meets said policy.

8. (Currently Amended) The ~~method of Claim 1~~ computer program product of claim 7, further comprising fifth instructions for providing a report on compliance to said policy by said first set of elements.

9. (Cancelled)

10. (Currently Amended) The ~~method of Claim 6~~ computer program product of claim 8, wherein said fifth instruction comprises reporting elements that did not comply with said policy.

11. (Currently Amended) The ~~method of Claim 6~~ computer program product of claim 7, wherein said third instruction uses the relationships of “belongs to” and “does not belong to”.

12. (Currently Amended) The ~~method of Claim 6~~ computer program product of claim 7, wherein said third instruction uses multiple relationships joined by the operations “and”, “or”, and “not”.

13. (Currently Amended) A computer system comprising:
a processor having a connection to a network;
a keyboard connected to input information to said processor;
an output device for providing reporting capabilities;

a set of instructions stored in memory and connected to be executed by said processor, said set of instructions comprising:

first instructions for defining, for each type of element in a plurality of computer systems that are connected to be managed by said computer system, attributes that are of interest in the operation of said computer systems;

second instructions for assigning, for each element in said plurality of computer systems, values to each of said attributes associated with said element;

third instructions for receiving a policy concerning a first set of said elements defined in terms of relationships between a corresponding first set of values of said attributes associated with said first set of elements and a second set of values; and

fourth instructions for performing at least one operation, chosen from a group of set operations consisting of: filter, projection, section, diagonal, union, intersection, subset, setminus, and cardinal, on said first set of values to determine if said first set of values meets said policy.

14. (Currently Amended) The computer system of ~~Claim 6~~ claim 13, further comprising fifth instructions for providing a report on compliance to said policy by said first set of elements.

15. (Cancelled)

16. (Currently Amended) The computer system of ~~Claim 11~~ claim 14, wherein said fifth instruction comprises reporting elements that did not comply with said policy.

17. (Currently Amended) The computer system of ~~Claim 11~~ claim 13, wherein said third instructions receive policies using the relationships of “belongs to” and “does not belong to”.

18. (Currently Amended) The computer system of ~~Claim 11~~ claim 13, wherein said third instructions receive multiple relationships joined by the operations “and”, “or”, and “not”.

19. (Currently Amended) The computer system of ~~Claim 11~~ claim 14, wherein said report is provided on said output device.